Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Establishing the Digital Opportunity Data Collection	)	WC Docket No. 19-195
	)	
Modernizing the FCC Form 477 Data Program	)	WC Docket No. 11-10
	)	

REPLY COMMENTS OF
HUGHES NETWORK SYSTEMS, LLC

Hughes Network Systems, LLC ("Hughes") hereby responds to the initial comments in the above-captioned proceeding regarding the Commission's collection of data regarding the availability of broadband and voice services.[1] As discussed in more detail below, the comments reflect broad agreement that the Digital Opportunity Data Collection ("DODC") should not collect information on the latency of broadband service. In addition, commenters advocating for special, satellite-specific reporting obligations fail to show any justification or benefit for their proposals. As a result, neither latency reporting nor satellite-specific requirements should be included in the DODC as neither are necessary

I. THERE IS BROAD AGREEMENT THAT THE DODC SHOULD NOT COLLECT LATENCY DATA

The overwhelming support in the record demonstrate that the Commission should continue to refrain from attempting to collect latency data in the DODC. In fact, those favoring latency data collection have no practical suggestions on how such data could be collected or more importantly, why it is needed.

[1] *Establishing the Digital Opportunity Data Collection; Modernizing the FCC Form 477 Data Program*, Report and Order and Second Further Notice of Proposed Rulemaking, WC Docket Nos. 19-195, 11-10, FCC 19-79 (rel. Aug. 6, 2019) ("NPRM").

A broad range of commenters, including both NCTA (which advanced the proposal for polygon-based reporting) and the Broadband Mapping Coalition of USTelecom, ITTA, and WISPA (which advanced the proposal for a nationwide broadband serviceable location fabric) agree that the Commission should not attempt to incorporate latency information into the DODC reporting framework. As NCTA observes, there is "no need for providers to report latency in connection with this new reporting obligation" and doing so would only "increase complexity and delay."[2] As the Broadband Mapping Coalition points out, "latency is not a factor that helps determine whether broadband service is *available*."[3]

Moreover, "the costs of implementing such a reporting requirement would likely be extremely burdensome, especially for small providers."[4] The Coalition rightly points to the complexity of the latency-testing process that Commission staff has developed for the Connect America Fund programs, and the impracticality of attempting to impose those testing protocols beyond CAF recipients.[5] Similarly, Verizon notes that latency reporting would "impose significant burdens on providers" and "would raise difficult technical questions about how and where providers should measure latency."[6] that the Commenters are correct that measuring latency is a labor-intensive process not suited to large-scale reporting.[7]

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[2] NCTA Comments at 6-7.

[3] BMC Comments at 22. *See also* GeoLinks Comments at 6; Hughes Comments at 8.

[4] BMC Comments at 23.

[5] *Id.* at 24.

[6] Verizon Comments at 4.

[7] *See* Hughes Comments at 7.

Smaller providers agree that the burdens of requiring latency reporting would be considerable and not justified by any benefits. For example, Smithville Telephone Company observes that requiring providers to report on additional factors such as latency would create problems for small providers such as itself and could even lead small providers to delay or decline to implement new services in order to avoid additional reporting.[8] Alaska Communications, GeoLinks, and Connected2Fiber all also oppose latency reporting.[9]

None of the commenters favoring latency reporting has any suggestions for overcoming the burdens of measuring latency, particularly as they affect smaller providers. A typical example is Next Century Cities, which, despite urging the Commission to collect latency data, acknowledges that it is "unable to make detailed suggestions as to how that data should be collected."[10]

Similarly, ACT-The App Association effectively acknowledges that "there are issues related to incorporating latency data into the Commission's broadband measurements and maps," and urges the Commission to "find a cost-effective solution to incorporate latency data into its maps."[11] ACT has no suggestion, however, regarding how to do so.

Connected Nation acknowledges that "measuring latency user-by-user is complex" and therefore proposes that the Commission collect "aggregate" information.[12] It is impossible,

[8] Smithville Comments at 11.

[9] Alaska Comms Comments at 8-10; Connected2Fiber Comments at 4; GeoLinks Comments at 6.

[10] Next Century Comments at 5.

[11] ACT Comments at 6.

[12] Connected Nation Comments at 6.

however, to provide aggregate data without first collecting individual data – a task which Connected Nation acknowledges is problematic.[13]

Some of the commenters favoring latency reporting also make unsubstantiated assertions that latency is important to the consumer experience, but none of them provides any data to support these assertions.[14] As Hughes demonstrated in its comments based on public data, ***the vast majority of the traffic on the Internet is not latency sensitive***.[15] GeoLinks agrees that latency is often immaterial to the customer experience, and in any event must less significant than speed.[16]

In sum, the record provides no information on how, from a practical perspective, latency information could be collected or any actual evidence for why it would be relevant. Thus, Commission has no basis to attempt to incorporate latency into the DODC data collection.

II. THE RECORD DOES NOT SUPPORT SPECIAL REPORTING REQUIREMENTS BY SATELLITE PROVIDERS BUT NOT OTHER TECHNOLOGIES

The proposals by a few commenters to impose special reporting obligations on satellite providers lack merit. First, as Hughes pointed out in its comments, the spot beams that satellite providers use to provide broadband service have particular capacity constraints – like all broadband providers' infrastructure – and there is no additional reason to require reporting on

[13] *Id.*

[14] *See, e.g.,* ACT Comments at 5-6; Connected Nation Comments at 6; GVNW Comments at 6; NTCA Comments at 12; WTA Comments at 17-18.

[15] Hughes Comments at 6-7.

[16] GeoLinks Comments at 6.

those limitations by satellite providers than by any other type of provider.[17] Hughes also observed that it was unclear why this type of information would be useful in a data collection such as this, focused on areas where broadband is available.[18]

No commenter suggesting that satellite broadband providers should be required to report on capacity issues articulates a reason why this would be useful, how it could be done practically, or why other types of broadband providers should not be subject to the same requirement. For example, NTCA and Next Century Cities suggest that satellite providers only should report service as available in an area if they could serve "each and every serviceable location in that area."[19]

No other providers are required to make this showing, however, and indeed few if any other providers would be capable of doing so, given that all networks are engineered based on assumptions about take rates and loading that are below 100%.[20] Limiting reporting to areas where providers could support a 100% take rate would therefore be completely unmoored from basic principles of broadband network design.

In addition, these comments fail to grapple with the reality that satellite broadband services *are available* throughout the areas covered by providers' spot beams – which for Hughes currently comprises the entire contiguous 48 states, southern Alaska, Puerto Rico, and the U.S. Virgin Islands.[21] Taken to their logical conclusion, NTCA's and New Century Cities'

[17] Hughes Comments at 3-4.

[18] *Id.* at 4-5.

[19] NTCA Comments at 4. *See also* Next Century Cities Comments at 5.

[20] Hughes Comments at 3-4.

[21] *See id.* at 2-3.

proposals would preclude satellite providers from reporting their coverage *at all*, which would undermine the Commission's goal of obtaining accurate information about where broadband service is available.

Free Press's suggestion that satellite broadband availability is "vastly overstated"[22] is equally meritless. Indeed, Free Press does not appear to claim that satellite broadband is not *actually* available broadly across the United States; rather, Free Press suggests that satellite broadband providers should not be permitted to report coverage in areas where they either do not have customers or cannot prove that they are actively direct-mailing marketing materials.[23] Neither of these criteria, however, would advance the Commission's goal of discerning "where broadband is available and where it is not,"[24] and neither has any place in DODC reporting. In its argument, Free Press also points to a quote from a Hughes executive observing that our target market comprises primarily the most rural customers,[25] purportedly to support the notion that "this service is not at all 'available' to most people residing in the United States."[26] However, the quote from the Hughes executive is hardly news – Hughes has always made clear that the great benefit of satellite broadband service is its ability to reach the hardest-to-serve rural customers in a cost-effective way.[27] If, as Free Press suggests, broadband providers should only

[22] Free Press comments at 14-17.

[23] *Id.* at 15-17.

[24] NPRM at ¶ 1.

[25] Free Press comments at 15.

[26] *Id.*

[27] *See, e.g.,* Comments of Hughes Network Systems, LLC on CAF-II Auction Procedures, WC Docket No. 10-90 (filed Sept. 18, 2017) ("Rural, remote, and tribal areas, where terrestrial infrastructure can be prohibitively expensive to deploy or install, have been long left behind by terrestrial broadband providers, but satellite broadband providers such as Hughes digitally

be able to claim service in areas where they market most aggressively, fiber-based providers only should be permitted to claim coverage in high-density business districts.

Tellingly, the article that Free Press cites for the quote from the Hughes executive – a first-person account of a high-tech couple's quest to telework from a rural town – concludes with this statement: "Relocating from Los Angeles to rural New Hampshire was a lifestyle move, and I think HughesNet fits pretty well into our new choices."[28] Indeed, satellite broadband service fits well into many American consumers' needs, and DODC reporting should reflect that. For the nearly 2 million customers that subscribe across the United States, satellite broadband service keeps these customers on the right side of the digital divide.

III. CONCLUSION

Hughes urges the Commission to move forward with the Digital Opportunity Data Collection consistent with its comments in this proceeding. Doing so will advance the Commission's objectives to have a solid understanding of broadband availability for all technologies across the United States.

Respectfully submitted,

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integrate those underserved communities and provide their residents with quality and cost-effective Internet services.")

[28] "Moving to the Woods Killed My Internet. Here's What I Did About It," *Wirecutter* (Sept. 11, 2019), https://thewirecutter.com/blog/moving-to-the-wilderness-killed-my-internet/.